# APPENDIX I

| CLAIM No.                                                                                                                                                                                                                                                                           | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 73. A coated optical fiber comprising:  an optical fiber; and                                                                                                                                                                                                                       | Original claim 3 (page 119, lines 11-12) is directed to "A coated optical fiber." Page 1, lines 20-22 ("The invention also relates to coated optical glass fibers")                                                                                                                                                                                                                                                                                                                                                             |
| a cured primary coating on the optical fiber                                                                                                                                                                                                                                        | Original claim 3 (page 119, lines 14-15) recites "said inner primary coating is comprised of a radiation cured polymeric material." The cured primary coating is disclosed at page 10, lines 6-7, 19-21; 31-32 ("inner primary coating [comprising or containing or formulated from] a radiation-curable oligomer"); page 32, lines 22-23 ("compositions were suitably cured by exposure to UV light"); page 48, lines 4-6 ("cured by exposure to UV light to form cured coatings.")                                            |
| wherein the primary coating is strippable from a portion of the optical fiber                                                                                                                                                                                                       | Original claim 3 describes a primary coating that is strippable from a portion of the optical fiber, where strippability is described in terms of fiber pull-out friction of less than 40 g/mm at stripping temperature (clause "a", lines 15-16. Strippability of the primary coating is described on page 8, lines 20-34 (" said inner primary coating is adapted to provide a fiber friction force to allow the inner primary coating to slide readily off from the optical glass fiber when a stripping force is applied ") |
| at a temperature in at least a portion of<br>the temperature range from about 25°<br>to about 125° C                                                                                                                                                                                | The temperature is described on page 32, lines 23-25 ("The dL/L for each coating was measured over the temperature range of 25 C (ambient temperature) to 125 C (highest usual stripping temperature).")                                                                                                                                                                                                                                                                                                                        |
| by exerting a force to a portion of the primary coating about the portion of optical fiber in a direction parallel to the longitudinal axis of the glass fiber which is away from a portion of the primary coating remaining on the optical fiber, such that the exertion of force, | A stripping method is disclosed on page 3, lines 6-23 and page 17, line 36 to page 18, lines 1-5 ("When a typical ribbon stripping tool is applied to a ribbon assembly, pressure is applied to the ribbon assembly between heated plates. At the ends of the plates near the cut made in the matrix material and the                                                                                                                                                                                                           |

| CLAIM No.                                                                                                                             | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                       | inner and outer primary coatings, the inner primary coating can form an initial delamination site on the optical glass fiber, shown at 27 and 28 [in Fig. 1].")                                                                                                                                                                                                                                                        |
| followed by an optional one wipe with<br>an alcohol laden piece of cloth or<br>paper of the stripped portion of the<br>optical fiber, | An optional one wipe with alcohol is disclosed in the article by Mills (the "Mills test") which is incorporated by reference at page 7, lines 7-11.                                                                                                                                                                                                                                                                    |
| results in a stripped portion of optical fiber having substantially no residue of the primary coating.                                | The results of stripping is disclosed on page 8, lines 30-31 ("while leaving substantially no residue on the surface of said optical glass fiber during ribbon stripping"); page 48, lines 30-34 ("Microscopic examination of the pulled-out fibers at low magnification (e.g., 10X) clearly revealed the presence or absence of debris on the glass surface. If debris was present, the amount of debris was noted"). |
| 74. The coated optical fiber of claim 73,                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| wherein the primary coating is strippable at the temperature upon execution of the force,                                             | See, claim 3 (page 119, lines 17-18) ("a fiber-pull-out at stripping temperature").                                                                                                                                                                                                                                                                                                                                    |
| to leave a stripped portion of the optical fiber having a Mill's value of about 2 or less.                                            | The Mills' test values represent strip cleanliness, (page 57, lines 11-14: "When referring to strip cleanliness and predicted strip cleanliness herein, the numerical values correspond to those of the Mill's test."). Values of about 2 or less are described on page 99, lines 35.                                                                                                                                  |
| 75. The coated optical fiber of claim 73,                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |
| wherein the primary coating is strippable at<br>the temperature upon exertion of the force to<br>leave                                | See, claim 3 (page 119, lines 17-18) ("a fiber-pull-out at stripping temperature").                                                                                                                                                                                                                                                                                                                                    |
| a stripped portion of the optical fiber having a Mill's test value of 1.5.                                                            | A Mills' test value of 1.5 is described on page 58, Table 5, Coating F, Rating (Mill's Value 1.5) and page 77, Table 8 (Ex. 4-5, 4-7, 4-11, 4-12 all values were 1.5).                                                                                                                                                                                                                                                 |
| 76. The coated optical fiber of claim 73,                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                        |

| CLAIM No.                                                                                                                                                                                             | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| wherein the coating prior to curing is liquid at 60° C.                                                                                                                                               | The coatings prior to curing are liquid at 60 °C, as shown by the measurement of viscosity at 25 °C, as shown on page 69, Table 6, (viscosity of primary coating compositions at 25 °C, in the range of 6760 to 7650 mPa.s; similar viscosity values at 25 °C for the primary coating compositions in Tables 7, 8, 9 and 10).                                                                 |
| 77. The coated optical fiber of claim 76, wherein the coating prior to curing is liquid at 25 °C.                                                                                                     | The coatings prior to curing are liquid at 25 °C, as shown by the measurement of viscosity at 25 °C: page 69, Table 6, (viscosity of primary coating compositions at 25 °C, in the range of 6760 to 7650 mPa.s; similar viscosity values at 25 °C for the primary coating compositions in Tables 7, 8, 9 and 10).                                                                             |
| 78. The coated optical fiber of claim 73,                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                               |
| wherein the primary coating is made of a material which is removable from a glass substrate by an adhesion test force of less than 45 g/in, as measured by a peel back test at 50% relative humidity, | The adhesion force (at 50% RH) of 45 g/in is shown in Ex. 2-2, Table 3, page 52; and an adhesion test force of less than 45 g/in. is shown in Ex. 2-3, Table 3, page 52. The adhesion test was performed utilizing a universal testing instument, e.g., an Instron Model 4201 (page 50, line 38 - page 51, line 3); one inch of each sample peeled back from the glass (page 51, lines 7-10). |
| has an elongation to break of at least about 88% as measure by ASTM D-638, and                                                                                                                        | An elongation to break of at least about 88% is shown by the examples: Table 8, page 76, Elongation: 100% to 180% (Ex. 4-6, 4-7 and 4-8); Table 9, page 82, Elongation: 88% (Ex. 5-2).                                                                                                                                                                                                        |
| has a tensile strength of at least about 72.5 psi as measured by ASTM D-638.                                                                                                                          | A tensile strength of 72.5 psi is disclosed in Ex. 5-2, Table 9, page 82 (0.5 MPa = 72.5 psi); Tensile strengths greater than 72.5 are disclosed for the primary coatings from Table 8, page 76: Ex. 4-6 (1.5 MPa = 218 psi); Ex. 4-7 (0.6 MPa = 87 MPa); Ex. 4-8 (1.1 MPa = 160 psi).                                                                                                        |
| 79. The coated optical fiber of claim 78,                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                               |
| wherein the adhesion test force is about 14 g/in.                                                                                                                                                     | An adhesion test force of 14 g/in is disclosed in Table 3, page 52, for Ex. 2-3: Adhesion at 50% RH = 14 g/in.                                                                                                                                                                                                                                                                                |

| CLAIM No.                                                                                                                                                                                      | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 80. The coated optical fiber of claim 73,                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                  |
| wherein the primary coating is made of a material which is removable from a glass substrate by an adhesion force of at least 5 g/in, as measured by a peel back test at 95% relative humidity, | The wet adhesion force of at least about 5 g/in is disclosed on page 51, lines 16-17. See page 50, line 21 where the "wet" adhesion is correlated to the 95% RH test. Actual reported values are disclosed in Table 3, page 52, adhesion force = 12 or 34 g/in at 95% RH (Ex. 2-3 and Ex. 2-2);                                                  |
| has an elongation to break is a least about 88% as measured by ASTM D-638, and                                                                                                                 | Elongation at break (measured by ASTM D-638M) of 88% is disclosed in Table 9, page 82, Ex. 5-2: Elongation = 88%; higher values are disclosed for examples Ex. 4-6 to 4-8 in Table 8, page 76.                                                                                                                                                   |
| has a tensile strength of at least about 72.5 psi as measured by ASTM D-638.                                                                                                                   | A tensile strength of at least about 72.5 psi is shown in Table 9, page 82, Ex. 5-2: (Tensile Strength = 0.5 MPa = 72.5 psi). Higher tensile strength values are shown in other examples: Ex. 5-4 (Tensile Strength = 1.1 MPa = 159.5 psi); Ex. 4-8 (Tensile Strength = 1.5 MPa = 217.5 psi) (Table 8, page 76).                                 |
| 81. The coated optical fiber of claim 78, wherein the elongation to break is about 140%.                                                                                                       | The elongation to break of 140% is disclosed in Table 8 (cont), page 76; Ex. 4-7.                                                                                                                                                                                                                                                                |
| 82. The coated optical fiber of claim 78, wherein the tensile strength is at least about 145 psi.                                                                                              | A tensile strength of 145 psi is disclosed in Example 4-1 in Table 7, page 74 (1 MPa = 145 psi). Higher tensile strength values are disclosed in Examples 4-6 (1.5 MPa = 217.5 psi) and 4-8 (1.1 MPa = 159.5 psi).                                                                                                                               |
| 83. The coated optical fiber of claim 73,                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                  |
| wherein said primary coating layer comprises                                                                                                                                                   | A primary coating layer which is the cured reaction product of from about 5 to about 80 wt.% of oligomers is disclosed on page 94, lines 1-5.                                                                                                                                                                                                    |
| a cured reaction product of from about 5 to about 80 percent by weight of one or more acrylate- or methacrylate- terminated urethane oligomers.                                                | Acrylate- or methacrylate terminated urethane oligomers are disclosed on page 93, lines 9-23 ("oligomers according to the invention can be made, for example, by reacting a diisocyanate compound with a long chain alkyl containing a hydroxy functional group and a radiation-curable functional group The urethane linking group is formed by |

| CLAIM No.                                                                                                        | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                  | the reaction of the isocyanate group with a hydroxyl group. In a second reaction the remaining isocyanate group is reacted with the as yet unreacted hydroxyl group of the compound Suitable examples of reactants containing a radiation-curable functional group and a hydroxy group are hydroxyethylacrylate or 2-hydroxypropylacrylate."). |
| 84. The coated optical fiber of claim 83,                                                                        |                                                                                                                                                                                                                                                                                                                                                |
| wherein said primary coating layer comprises                                                                     | Disclosure of a primary coating layer comprising a cured reaction product of from                                                                                                                                                                                                                                                              |
| a cured reaction product of,                                                                                     | about 0.1 to about 20% by weight of                                                                                                                                                                                                                                                                                                            |
| in addition to the acrylate or methacrylate-<br>terminated oligomer                                              | additional monofunctional monomers is found on page 73, lines 14-15 ("Suitable amounts of mono-functionalized monomers have been                                                                                                                                                                                                               |
| from about 0.1 to about 20 percent by weight of                                                                  | found to be about 0.1 to about 20% by weight.")                                                                                                                                                                                                                                                                                                |
| a monomer selected from the group consisting of isobornyl acrylate,                                              | Isobornyl acrylate is disclosed on page 104, line 18.                                                                                                                                                                                                                                                                                          |
| isodecyl acrylate,                                                                                               | Isodecyl acrylate is disclosed on page 82,<br>Table 9 (Ex. 5-1, Ex. 5-3).                                                                                                                                                                                                                                                                      |
| hexanediol diacrylate,                                                                                           | Hexanediol diacrylate is disclosed on page 103, line 21.                                                                                                                                                                                                                                                                                       |
| phenoxyethyl acrylate, and                                                                                       | Phenoxyethyl acrylate is disclosed on page 89, Table 11, Ex. 11-1.                                                                                                                                                                                                                                                                             |
| lauryl acrylate.                                                                                                 | Lauryl acrylate is disclosed on page 104, line 19.                                                                                                                                                                                                                                                                                             |
| 85. The coated optical fiber of claim 83 wherein                                                                 |                                                                                                                                                                                                                                                                                                                                                |
| said primary coating layer additionally comprises about 1.0 wt% of an organofunctional silane adhesion promoter. | The disclosure of organofuntional silane adhesion promoter is found on page 37, line 28 through page 38, line 37: ("'glass coupling moiety' is understood to mean a functional group which has the ability to improve adhesion to an inorganic surface or at an inorganic surface", "Silane coupling moieties are preferred."                  |
|                                                                                                                  | Although the "amount of glass coupling is not particularly limited" (page 42, lines 6-8) the amount of 1.0 wt.% is disclosed on page 69, Table 6, gamma-mercaptopropyl trimethoxy silane (1 part by weight of 100                                                                                                                              |

| CLAIM No.                                                                                                                                                                                         | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                   | parts).                                                                                                                                                                                                                                                                                                    |
| 86. The coated optical fiber of claim 85, wherein said adhesion promoter is a mercapto-functional silanes.                                                                                        | The mercapto-functional silanes are disclosed on page 38, lines 24-26 ("Common organic functionalities of the silane agents include, for example, mercapto, ").                                                                                                                                            |
| 87. The coated optical fiber of claim 85, wherein said adhesion promoter is 3-mercaptopropyltrimethoxy-silane.                                                                                    | 3-mercaptopropyltrimethoxysilane is disclosed on page 69, Table 6 (Ex. 3-1 to 3-4).                                                                                                                                                                                                                        |
| 88. The coated optical fiber of claim 83, wherein said primary coating layer additionally comprises a photoinitiator.                                                                             | The addition of a photoinitiator is disclosed on page 45, line 33 ("at least one photoinitiator").                                                                                                                                                                                                         |
| 89. The coated optical fiber of claim 83, wherein said primary coating layer additionally comprises from about 0.5 percent by weight of thiodiethylene bis(3,5-di-tert-butyl-4-hydroxy cinnamate. | A disclosure of about 0.5 percent by weight of thiodiethylene bis(3,5-di-tert-butyl-4-hydroxy cinnamate is in Ex. 2-4 on page 54, Table 4 (0.5%).                                                                                                                                                          |
| 90. The coated optical fiber of claim 73, wherein the primary coating comprises the radiation-cured reaction product of the following ingredients:                                                | A disclosure of "a radiation-curable inner primary coating composition containing at least one radiation-curable urethane oligomer comprising at least one polymeric block and at least one functional group capable of polymerization in the presence of actinic radiation connected to said at least one |
| (A) from about 5 percent to about 80 percent by weight of                                                                                                                                         | polymeric block" is found on page 11, lines 22-28.  The amount of linear oligomer can be from about 5 to about 80 wt.% (page 91, lines 5-                                                                                                                                                                  |
| a reactively terminated urethane oligomer which is the reaction product of                                                                                                                        | 10).  A disclosure of reactively terminated urethane oligomers is found on page 42, lines 26-33: "Representative linking compounds include diisocyanate compounds, wherein                                                                                                                                 |

## CLAIM No.

- (i) polyether polyol;
- (ii) a wholly aliphatic polyisocyanate; and
- (iii) an endcapping monomer supplying a reactive terminus;

(B) from about 15 percent to about 65 percent by weight of ethoxylated nonyl phenol acrylate;

# Serial Nos. 09/757,828 & 09/035,771

linkage occurs by formation of urethane, ... by reaction of hydroxyl, ... with isocyanate ... although aliphatic diisocyanates are preferred."

Endcapping monomers supplying a reactive terminus are shown by the formula on page 90, lines 8 et seq., as linear oligomers to improve ribbon stripping operations:

 $R^1$ - L -  $[R^2$ -L]<sub>n</sub>- $R^3$ , where  $R^1$  and  $R^3$  are organic groupings having radiation curable functional groups;  $R^2$  is an organic radical, L is a linking group, and  $[R^2$ -L]<sub>n</sub> can contain polyether.

See also page 92, lines 4 et seq. for the radiation-curable oligomer of formula R<sup>4</sup>-x-L-x-[R<sup>5</sup>-x-L-x]<sub>n</sub>-R<sup>6</sup>, where R<sup>4</sup> is a substantially linear long chain alkyl terminating in at least one hydroxyl group; L represent a molecular bridging group preferably derived from a diisocyanate precursor, x represent resulting reacting linking group, e.g., urethane, R<sup>5</sup> is a linear or branched or cyclic hydrocarbon or polyether moiety derived from a diol, and can contain a branched or cyclic aliphatic group, R<sup>6</sup> is an end group carrying a radiation-curable functional group.

See also, e.g., page 100, line 37 to page 101, line 2 ("The radiation-curable oligomer can be easily formed by reacting a polymeric polyol, a compound containing a radiation-curable functional group and a hydroxyl group, and a polyisocyanate."); page 101, lines 7-9 (examples of polymeric polyols include polyether diols); page 102, lines 24-26, et seq for organic polyisocyanates, including the wholly aliphatic polyisocyanates and examples in Table 15, page 106 and Table 16, page 107, Table 17, page 110, Table 18, page 112, Table 19, page 113, Table 20, page 114 and Table 21, page 115.

A disclosure of the inner primary coating composition including (B) ethoxylated nonylphenol acrylate between about 15% and about 65% is found in Ex. 11-1, Table 11,

| CLAIM No.                                                                                                                                      | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (C) from about 1.5 percent to about 3                                                                                                          | page 89 (15.1%) and Ex. 3-1, Table 6, page 69 (64.4%).                                                                                                                                                         |
| percent by weight of a photoinitiator; and                                                                                                     | From about 1.5 to about 3% of photoinitiator (C) photoinitiator is found in Table 8, page 75, Ex. 4-9 (1%), Ex. 4-8 (3%).                                                                                      |
| (D) about 1 percent by weight of an organofunctional silane adhesion promoter which binds in with the primary coating composition during cure; | About 1% of (D) organofunctional silane adhesion promoter is disclosed in Examples 3-1 to 3-4 in Table 6, page 69.                                                                                             |
| wherein all of the stated percentages are percentages by weight based on the total weight of the primary coating prior to cure,                | The disclosure of the sums of the amounts based on the total weight of the primary coating prior to cure is seen from the data in the Tables wherein the total of the ingredients was 100 wt.%.                |
| wherein the tensile modulus of the coating composition, when cured, is less than about 220 psi at 25° C, and                                   | A disclosure of tensile modulus values of less than about 220 psi at 25°C is found in Table 8, page 76: Ex. 4-3 (1.2 MPa = 174 psi); Ex. 4-7 (1.1 MPa = 160 psi) and Ex. 4-8 (1.3 MPa = 188.5 psi).            |
| wherein the refractive index of the cured coating composition is suitable for an optical fiber coating.                                        | A disclosure of refractive index suitable for an optical coating is inherent throughout the specification. Formation of "clear" films suitable for an optical fiber coating are disclosed in Table 6, page 69. |
| 91. The coated optical fiber of claim 73,                                                                                                      |                                                                                                                                                                                                                |
| wherein the primary coating comprising the radiation-cured reaction product of the following ingredients:                                      | See discussion for Claim 90 for the support for claim 91.                                                                                                                                                      |
| (1) from about 5 to about 80 percent<br>by weight of an acrylate-<br>terminated aliphatic polyether<br>urethane oligomers;                     |                                                                                                                                                                                                                |
| (2) from about 15 to about 65 percent<br>by weight of ethoxylated nonyl phenol<br>acrylate;                                                    |                                                                                                                                                                                                                |
| (3) from about 1.5 to about 3 percent by weight of a photoinitiator; and                                                                       |                                                                                                                                                                                                                |

| CLAIM No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (4) about 1 percent by weight of an organofunctional silane adhesion promoter which binds in with the primary coating composition during cure;  wherein all of said percentages being percentages by weight based on the weight of the primary coating prior to cure.                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                              |
| 92. The coated optical fiber of claim 91, wherein said primary coating is obtained by curing a composition that is liquid at 25° C.                                                                                                                                                                                                                                                                                                                                                                                                                                            | The coatings prior to curing are liquid at 25 °C, as shown by the measurement of viscosity at 25 °C: page 69, Table 6, (viscosity of primary coating compositions at 25 °C, in the range of 6760 to 7650 mPa.s; similar viscosity values at 25 °C for the primary coating compositions in Tables 7, 8, 9 and 10).                                                            |
| 93. An optical ribbon comprising a plurality of optical fibers of claim 73 and a matrix material, the plurality of fibers held together in a parallel arrangement by the matrix material.                                                                                                                                                                                                                                                                                                                                                                                      | A ribbon assembly comprising a plurality of coated optical fibers, at least one optical glass fiber coated with at least an inner primary coating and a matrix material bonding the plurality of coated optical fibers together is the subject matter of original claim 4.  A disclosure of ribbon assemblies is found on page 1, lines 22-24 and page 116, lines 10 et seq. |
| 94. A method of preparing a coated optical fiber for splicing, the coated optical fiber being a coated optical fiber according to claim 73, comprising the steps of: stripping the primary coating away from a portion of the optical fiber at a temperature in at least a portion of the temperature range from about 25° to about 125° C. by cutting with a blade into the primary coating, then having the blade exert a force on the primary coating in a direction parallel to the optical fiber to force the primary coating away from the portion of the optical fiber, | A disclosure of a method for preparing a coated optical fiber for splicing including ribbon stripping is found on page 3, lines 6-23.                                                                                                                                                                                                                                        |

| CLAIM No.                                                                                                                                                                                                                                                                    | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| and optionally wiping the portion of optical fiber from which primary coating has been forced away with an alcohol laden piece of cloth or paper,  such that the stripped portion exhibits little or no residue of the primary coating.                                      | A disclosure of the optional wiping step is found in the Mills' test incorporated by reference into the application on page 7, lines 6-11.  The result of stripping is disclosed on page 8, lines 30-31 ("while leaving substantially no residue on the surface of said optical glass fiber during ribbon stripping"); page 48, lines 30-31 ("Microscopic examination of the pulled-out fibers at low magnification (e.g., 10X) clearly revealed the presence or absence of debris on the glass surface. If debris was present, the amount of debris was noted"). |
| 95. A method of splicing coated optical fibers comprising, preparing two optical fibers for splicing according to the method of claim 94;  aligning the stripped portions of the prepared optical fibers; and  joining the stripped portions of the prepared optical fibers. | A method for connecting optical fibers individually or as ribbon assemblies for "mass fusion splicing operation" is disclosed on page 2, lines 23-37.                                                                                                                                                                                                                                                                                                                                                                                                             |
| 96. A spliced optic fiber made by the method of claim 95.                                                                                                                                                                                                                    | A disclosure of a spliced optic fiber by the splicing operation is found on page 2, lines 23-37                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 97. A coated optical fiber comprising: an optical fiber;                                                                                                                                                                                                                     | A coated optical fiber comprising an optical fiber and primary coating is disclosed on page 9, lines 10-14;                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| a primary coating coated onto the optical fiber, the primary coating made of a material which is removable from a glass substrate by an adhesion test force of less than 45 g/in, as measured by a peel back test at 50% relative humidity                                   | Examples 2-2 and 2-3 (Table 3, page 52) show that the invention encompasses coatings having an adhesion force of 45 g/in or less ("peel back" test is described on page 51, lines 4-16; adhesion test at 50% RH shown in Table 3);                                                                                                                                                                                                                                                                                                                                |
| an elongation of at least about 88% as measured by ASTM D-638, and a tensile strength of at least about 72.5 psi as                                                                                                                                                          | An 88% elongation is disclosed in Example 5-3 on page 82 in Table 9; ASTM D-638M is disclosed on page 59, line 30 to page 62, line 11.                                                                                                                                                                                                                                                                                                                                                                                                                            |

| CLAIM No.                                                                                                                                                                                                                                                                          | Serial Nos. 09/757,828 & 09/035,771                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| measured by ASTM D-638.                                                                                                                                                                                                                                                            | A tensile strength of 72.5 psi, is disclosed as 0.5 MPa in Exaple 5-3 on page 82 in Table 9. The conversion from MPa to psi (1MPa = 145 psi) can be found on page 60, line 33.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 98. A process for preparing a coating optical fiber comprising  (1) applying to an optical fiber a primary coating composition layer comprising a mixture of the following ingredients:                                                                                            | A process for preparing a coated optical fiber by applying a primary coating composition to the optical fiber is shown generally throughout the specification and examples, including, page 1, lines 28-30; page 46, lines 26-34 (including the disclosure of incorporated patents 4,474,830 and 4,913,859).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| (A) from about 5 percent to about 80 percent<br>by weight of a reactively terminated urethane<br>oligomer which is the reaction product of (i) a<br>polyether polyol; (ii) a wholly aliphatic<br>polyisocyanate; and (iii) an endcapping<br>monomer supplying a reactive terminus; | The composition with ingredients (A), (B), (C) and (D) are also described throughout the specification. A reactively terminated urethane oligomer (see, e.g., the formulas on page 43, lines 8-19; page 90, lines 8-25; page 92, lines 4-32) wherein the linking group L or x is preferably urethane (e.g., page 42, lines 27; page 90, lines 17-18; page 92, lines 16-17).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                    | The reaction of a mixture of (i) polyether polyol, (ii) wholly aliphatic diisocyanate and (iii) end-capping monomer supplying a reactive terminus, is shown in Examples (e.g., page 52, Table 3, Oligomer C: reaction product of (i) polytetramethylene ether glycol, (ii) isophorone diisocyanate, and (iii) hydroxyethylacrylate and mercaptosilane) and is also generally disclosed on page 100, line 37 to page 101, line 2 ("The radiation-curable oligomer can be easily formed by reacting a polymeric polyol, a compound containing a radiation-curable functional group and a hydroxyl group, and a polyisocyanate."); page 101, lines 7-9 (examples of polymeric polyols include polyether diols); page 102, lines 24-26, et seq for organic polyisocyanates, including the wholly aliphatic polyisocyanates and examples in Table 15, page 106 and Table 16, page 107, Table 17, page 110, Table 18, page 112, Table 19, page 113, Table 20, page 114 and Table 21, page 115. The range of about 5 to about 80% is disclosed on page 94, lines 1-6. |

#### CLAIM No.

- (B) from about 15 percent to about 65 percent by weight of ethoxylated nonyl phenol acrylate;
- (C) from about 1.5 percent to about 3 percent by weight of a photoinitiator; and
- (D) about 1 percent by weight of an organofunctional silane adhesion promoter which binds in with the primary coating composition during cure;

wherein all of the stated percentages are percentage by weight based on the total weight of the primary coating prior to cure,

wherein the tensile modulus of the coating composition when cured, is less than about 220 psi at 25° C., and

wherein the refractive index of the cured coating composition is suitable for an optical fiber coating;

and

(2) radiation-curing said coating in situ,

wherein the primary coating is strippable from a portion of the optical fiber at a temperature in at least a portion of the temperature range from about 25° to about 125° C. by exerting a force to a portion of the primary coating in a direction parallel to the longitudinal axis of the glass fiber which is away from a portion of the primary coating remaining on the optical fiber, such that the exertion of force followed by an optional one wipe, with an alcohol laded piece of cloth or paper of the stripped portion of optical fiber, results in the stripped portion of optical fiber having a substantially no residue of the primary coating.

## Serial Nos. 09/757,828 & 09/035,771

The Examples on page 52, Table 3, also include (B) ethoxylated nonyl phenol acrylate; (C) photoinitiator; and (D) organofunctional silane, at or within the stated ranges. The range of about 15% to 65% for reactant (B) is found in the examples, e.g., page 89, Table 11; page 69, Table 6, respectively. The range of about 1.5% to about 3% for reactant (C) is found in the examples, e.g., page 32, Table 1 (1.54%); page 89, Table 11 (3%). The amount of 1% of the organosilane adhesion promoter is 1% in the composition of Example 11-1, page 89, Table 11.

The tensile modulus of the cured composition of less that about 220 psi is shown to be part of the invention by reference to, for example, Example 4-1, on page 74, Table 7 (1.4 MPa = 203 psi); Ex. 4-3, Ex. 4-7 and Ex. 4-8, on page 76, Table 8 (CONT) with values of 174 psi (1.2 MPa), 160 psi (1.1 MPa) and 188.5 psi (1.3 MPa), respectively.

The refractive index being suitable for an optical coating, is implicit throughout the disclosure and is exemplified by the clear films obtained in Examples 3-1 to 3-4, on page 69, Table 6.

The step of radiation-curing in situ is also implicit throughout the disclosure and is shown, for example, on page 32, lines 22-23 and page 48, lines 4-6.

That the primary coating is strippable at the temperature ranges and under the conditions specified, with substantially no residue of the primary coating is disclosed throughout the specification, for example, page 32, lines 24-25 for the temperature range of 25° to 125° C; and Ex. 2-1, on page 49, Table 2, for "no residue." The optional one wipe with alcohol is disclosed in the incorporated Mills test disclosure as stated on page 7, lines 6-11.